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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/658,901	09/09/2003	Nicholas J. Richardson	02-C-129	3611

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Lisa K. Jorgenson
STMicroelectronics, Inc.
1310 Electronics Drive
Carrollton, TX 75006

EXAMINER

ALAM, SHAHID AL

ART UNIT PAPER NUMBER

2162

DATE MAILED: 03/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/658,901

Applicant(s)

RICHARDSON, NICHOLAS J.

Examiner

Shahid Al Alam

Art Unit

2162

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 September 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

1. Claims 1 – 22 are pending in this Office action.

Drawings

2. New Formal drawings in compliance with 37 CFR 1.121(d) are required in this application because the drawings submitted are informal drawing. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected Formal drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1 – 22 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

MPEP 2106 IV.B.2.(b)

A claim that requires one or more acts to be performed defines a process. However, not all processes are statutory under 35 U.S.C. 101. Schrader, 22 F.3d at 296, 30 USPQ2d at 1460. To be statutory, a claimed computer-related process must either: (A) result in a physical transformation outside the computer for which a practical application is either disclosed in the specification or would have been known to a skilled artisan, or (B) be limited to a practical application.

The independent claims recite for receiving a search command and determining at a network packet search engine whether the longest prefix match comprises an overall longest prefix match among the cascaded network packet search engines.

In the above limitation, there is no physical transformation being claimed, a practical application would be established by a useful, concrete and tangible result.

For it to be a tangible result, it must be more than a thought or a computation and must have a real world value rather than being an abstract idea. The invention, as recited in the claim, receive a search command and determining whether there is a match. It is unclear as to what kind of tangible output is obtained by determining a match.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1 – 22 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent Number 6,631,419 issued to Spencer Greene.

With respect to claim 1, Greene teaches a method for providing cascaded network packet search engines (column 4, lines 49 – 50), comprising:

receiving a search command at one of the network packet search engines, the search command comprising a specific search key (column 6, lines 50 – 53);

determining at the network packet search engine a longest prefix match based on the specific search key; and

determining at the network packet search engine whether the longest prefix match comprises an overall longest prefix match among the cascaded network packet search engines (column 4, lines 49 – 60) such that any of the cascaded network packet search engines may comprise the overall longest matching prefix independently of position relative to the other cascaded network packet search engines (column 7, lines 28 – 32 and column 4, lines 43 – 45).

As to claim 2, responding to the search command when the longest prefix match comprises the overall longest prefix match (column 4, lines 49 – 60).

As to claim 3, responding to the search command comprising actively responding to the search command (column 4, lines 49 – 60).

As to claim 4, responding to the search command comprising passively responding to the search command (column 4, lines 49 – 51).

As to claim 5, storing a mock result when the longest prefix match fails to comprise the overall longest prefix match (column 4, lines 43 – 45).

As to claim 6, the one of the network packet search engines comprising a peripheral network packet search engine, determining whether the longest prefix match comprises the overall longest prefix match comprising: receiving longest match input data from an adjacent network packet search engine; comparing the longest match input data to the longest prefix match; and determining that the longest prefix match is longer than the longest match input data (column 4, lines 43 – 45, column 6, lines 50 – 53 and column 7, lines 28 – 32).

As to claim 7, the one of the network packet search engines comprising a central network packet search engine, determining whether the longest prefix match comprises the overall longest prefix match comprising:

receiving first longest match input data from a first adjacent network packet search engine and second longest match input data from a second adjacent network packet search engine (column 6, lines 50 – 53);

comparing the first longest match input data to the longest prefix match and the second longest match input data to the longest prefix match (column 8, lines 47 – 50);
and

determining that the longest prefix match is longer than the first longest match input data and longer than the second longest match input data (column 7, lines 18 – column 8, lines 61).

The Subject matter of claims 8 – 13, 14 – 16, 17 – 21 and 22 are rejected in the analysis above in claims 1 – 7 and these claims are rejected on that basis.

Contact Information

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shahid Al Alam whose telephone number is (571) 272-4030. The examiner can normally be reached on Monday-Thursday 8:00 A.M.- 4:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E. Breene can be reached on (571) 272-4107. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for applications may be obtained from either Private PAIR or Public PAIR. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Shahid Al Alam
Primary Examiner
Art Unit 2162

20 March 2006